Gregor, Margaret

From: Gregor, Margaret

Sent: Friday, April 03, 2015 2:42 PM

To: 'robert.cozzy@dec.ny.gov'; 'jane.oconnell@dec.ny.gov'; Stephanie L Selmer

(stephanie.selmer@health.ny.gov); Deming, Justin (HEALTH)

Subject: EPA Columbia Smelting/Red Hook Ball Fields - March 2015 Sampling Results

Attachments: EPA Columbia Smelting and Refining Sampling Data - March 2015.zip

Good afternoon,

We received the validated results for EPA's March 2015 soil sampling at the Columbia Smelting & Refining Works Site/Red Hook Ball Fields in Brooklyn. The sampling was to delineate the area with known smelter-related contamination at the ball fields (the block which includes the historic facility footprint), and screen other downwind fields for contamination. Please find attached a zip file containing the original lab files (the complete data set), a sample location map and a second spreadsheet which includes filters, formatting and a few summary tables I added to make the data easier to review. We have not yet completed the elemental correlation analysis.

Unfortunately, the lead levels at the ball fields are higher than had been expected. 96% of the lead samples in the upper foot of soil (48 of 50 samples) contained lead above 400 parts per million, and 80% of samples in the top foot (40 of 50) contained lead above 1,200 ppm. Here is a summary of the lead results for the ball fields vs. the other fields we screened, broken down by depth intervals:

				<u>Total</u> # of	# of Samples	# of Samples
Sample Depth	Location IDs	Location Description	# of Samples Collected	Samples >400 ppm	between 400 and 1,200 ppm	> 1,200 ppm
0-1"	SS002 - SS017	Ball Fields	16	14 (88%)	4 (25%)	10 (63%)
1-6"	SS002 - SS017	Ball Fields	17*	17 (100%)	3 (18%)	14 (82%)
6-12"	SS002 - SS017	Ball Fields	17*	17 (100%)	1 (6%)	16 (94%)
12-18"	SS002 - SS017	Ball Fields	17*	17 (100%)	1 (6%)	16 (94%)
18-24"	SS002 - SS017	Ball Fields	17*	17 (100%)	2 (12%)	15 (88%)
0-1"	SS019 - SS029	All Other Fields	12*	2 (17%)	2 (17%)	0
1-6"	SS019 - SS029	All Other Fields	12*	4 (33%)	3 (25%)	1 (8%)
6-12"	SS019 - SS029	All Other Fields	12*	5 (42%)	3 (25%)	2 (17%)
12-18"	SS019 - SS029	All Other Fields	11	9 (82%)	7 (64%)	2 (18%)
18-24"	SS019 - SS029	All Other Fields	12*	9 (75%)	7 (58%)	2 (17%)

^{*}included duplicate sample for QA/QC purposes.

EPA is still processing the information, but I sent this data to NYC Parks, Health and Law yesterday. From our initial review, it looks like we'll be recommending closure of the ball fields until a removal action can be completed. Fortunately, the fields are currently closed and the entrances are blocked off with 8' chain-link fences. We'll be coordinating with the city in the coming weeks to determine the next steps.

We'll keep you posted on the progress and feel free to get in touch with questions any time.

Best regards,

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